STÂTE OF CALIFORNIA Budget Change Proposal - Cover Sheet

DF-46 (REV (J8/16)				
Fiscal Year 2017-18	Business Unit 3480	Department Conservation			Priority No. 6
Budget Request Name 3480-006-BCP-BR-2017-GB		GEOTHERN	Program 2425 – OIL, GAS AND GEOTHERMAL REGULATION		JLATION OF OIL RATIONS
Budget Reques AB 2729 Imple	t Description mentation, Idle W	/ell Testing			" '
Budget Reques	t Summary	-			
permanent posi Fund (3046) to inspections data assist the State	tions, and \$1,500, develop the new lo a collection, idle wo Oil and Gas Supe	Division of Oil, Gas, an 000 (\$2,500,000 ongoir dle Well Management P ell management plan re ervisor in developing a c alendar year to be subr	ng) from the Oil, G Program. Positions view, compliance comprehensive rep	as and Geotherm s and funding will monitoring, and e ort on the status	al Administrative be used for testing, nforcement, and to
There is no Ger	neral Fund impact	with this proposal.			
Requires Legisl Yes	ation ⊠ No		Code Section(s)	to be Added/Ame	ended/Repealed
	contain information ☐ Yes		Department CIO		Date
If yes, departme	ental Chief Informa	tion Officer must sign.			
For IT requests, S2AA, S3SD, S	specify the projec 4PRA), and the ap	et number, the most reco oproval date.	ent project approv	al document (FSF	R, SPR, S1BA,
Project No.	Pro	ject Approval Documer	nt:	Αţ	proval Date:
		nent, does other depart			Yes ☐ No signee.
Prepared By		Date	Reviewed By		Date
Department Dire	ector	Date	Agency Secretar	у	Date
		Department of Fir	nance Use Only		
Additional Revie	ew: 🔲 Capital Outl	ay ITCU FSCL	OSAE C	CALSTARS D	ept. of Technology
BCP Type:	Polic	y Workload	d Budget per Gove	rnment Code 133	08.05
PPBA Original Signed by Amanda Martin Date submitted to the Legislature				1-10-17	

1-10-17

A. Budget Request Summary

The Department of Conservation (Department), Division of Oil, Gas, and Geothermal Resources (Division), requests 15.0 permanent positions, and \$1,500,000 (\$2,500,000 ongoing) from the Oil, Gas and Geothermal Administrative Fund (3046) to develop the new Idle Well Management Program (IWMP). Positions and funding will be used for testing, inspections data collection, idle well management plan review, compliance monitoring, enforcement, and to assist the State Oil and Gas Supervisor in developing a comprehensive report on the status of idle and long-term idle wells for the preceding calendar year to be submitted to the Legislature.

AB 2729 redefines an "idle well" as one that has had 24 months with no production or injection (instead of 5 years); redefines a "long-term idle well" as a well that has been idle for 8 years (instead of 10); removes the option for a large operator to secure an escrow account or post a "super blanket bond" to avoid paying idle well fees; allows an operator to implement an Idle Well Management Plan (IWM Plan), in lieu of paying idle well fees; and provides a means through which a person who acquires land with one or more wells on it to re-plug and abandon the well(s).

B. Background/History

The Division regulates oil, gas, and geothermal well operations throughout the State and administers laws for the conservation of petroleum and geothermal resources. One of the Division's missions is to prevent damage to life, health, property, and natural resources by ensuring that wells are properly drilled, operated for production and injection purposes, repaired, and plugged and abandoned.

Since 1976, the Division has administered a program to plug orphan wells. Public Resources Code (PRC) Section 3258 currently allows up to \$1 million to be spent for this purpose. Prior to 2008-09, PRC Section 3258 limited annual Division expenditures to abandon orphaned wells at \$500,000. A 2008-09 Budget Change Proposal increased the expenditure limit to \$1 million per year; this expenditure limit was temporarily increased to \$2 million dollars through 2014-15 and again for 2016-17 in Senate Bill 826 (Chapter 23, Statutes of 2016).

Funding for plugging and abandoning orphan wells comes from two sources, the Oil, Gas, and Geothermal Administrative Fund, and the Hazardous and Idle-Deserted Well Abatement Fund (HIDWAF). Expenditures from the HIDWAF may be used to mitigate a hazardous or potentially hazardous condition by well plugging and abandonment.

Oil, Gas and Geothermal Administrative Fund Resource History

(Dollars in thousands)

		•		
2011-12	2012-13	2013-14	2014-15	2015-16
28,957	34,278	35,882	53,851	56,461
27,643	32,264	35,724	48,473	53,043
29,055	30,552	30,931	61,607*	70,895*
177.9	195.9	194.8	244.9	259.9
141.8	153.2	176.5	184.8	195.2
36.1	42.7	18.3	61.9	64.7
	28,957 27,643 29,055 177.9 141.8	28,957 34,278 27,643 32,264 29,055 30,552 177.9 195.9 141.8 153.2	28,957 34,278 35,882 27,643 32,264 35,724 29,055 30,552 30,931 177.9 195.9 194.8 141.8 153.2 176.5	28,957 34,278 35,882 53,851 27,643 32,264 35,724 48,473 29,055 30,552 30,931 61,607* 177.9 195.9 194.8 244.9 141.8 153.2 176.5 184.8

^{*}Revenue covers fund appropriations to the Air Resources Board and State Water Resources Control Board

Idle Wells

California has approximately 20,000 idle oil and gas wells. While operators have legitimate reasons to idle wells in the short-term, prior to the passage of AB 2729, statutes allowed wells to remain idle for long periods of time, in many cases, decades. The longer a well is idle, the more likely it is that the well will develop mechanical problems or be deserted. With insufficient bonding requirements under existing law, the Division could be responsible for hundreds of millions of dollars in plugging and abandonment costs in cases where wells are deemed to be hazardous or potentially hazardous. In addition to the known 20,000 idle wells, thousands of legacy wells from the early, unregulated days of oil and gas development still exist in Southern California. These wells were plugged prior to modern standards being developed and can pose potential threats to human health and safety, and to the environment.

Idle wells can pose a risk to vegetation, soil, surface water, underground aquifers, and air quality. Well casings act as a conduit through which contaminates can travel. Improperly maintained well casings can rust or crack, allowing lead, salt, sulfates, and other contaminants to enter freshwater aquifers. Due to minimal testing requirements, leaks and damage to idle wells can go unnoticed for years.

C. State Level Considerations

California is the third largest oil-producing state in the nation, producing over 200 million barrels in 2015. Based on 2013 data, the Los Angeles Economic Development Commission estimated that oil and gas production related activities employed over 100,000 people statewide. Property and other tax payments to the State and local governments from the industry are in the hundreds of millions of dollars. There are over 55,000 active production and injections wells and approximately 20,000 idle production and injection wells in the State. These wells pose a financial and staff resources risk to the State, as well as potential to cause harm to life, health, property, and natural resources.

D. Justification

Chapter 272, Statutes of 2016 (AB 2729) enacted substantive changes to increase the Division's oversight and management of idle wells. Idle wells, particularly long-term idle wells, can pose a risk to vegetation, soil, surface water, underground aquifers, and air quality; result in gas leaks; and potentially endanger public health and safety. The Division's enhanced oversight will require it to incur significant new costs to development and implement a revised IWM Program.

Expanded Definitions of Idle Wells Increase Division Workload

Prior to the passage of AB 2729, a well was not deemed idle until the well had been inactive for 5 years, and wells were not classified as long-term idle wells until the well had been inactive for 10 years. This significant gap in production provided a disincentive to operators to properly plug and abandon non-profitable wells. AB 2729 modified the definition of "idle well" to include all wells that have not produced or injected for 24 months, and redefined a "long-term idle well" as a well that has been idle for 8 years.

By amending the definition of "idle well," and "long-term idle," the Division anticipates that the number of wells considered idle and long-term idle will increase from 20,000 to over 26,000 wells. The Division is required, pursuant to existing law, to oversee idle well field testing, including fluid level surveys, pressure tests, and cleanout tags. Division staff must provide reports pursuant to these tests. As a result of the increase in wells characterized as "idle" or "long-term idle" due to the new definitions provided in AB 2729, the Division anticipates an immediate need to hire and

deploy new engineers and geologists to oversee the additional wells that will be reclassified beginning January 1, 2017.

Financial Assurances and Long-Term Management for Idle Wells

AB 2729 revised and recast the law dictating the financial assurances operators must provide prior to acquiring, drilling, redrilling, deepening, or in any operation permanently altering the casing, of a well. AB 2729 increased idle well fees, increased all bonding requirements, and eliminated large "blanket bond" options. Existing law provides operators seeking to avoid paying bonds and fees the opportunity to eliminate idle wells pursuant to an IWM Plan. The Supervisor must approve all IWM Plans, and Division staff must ensure compliance with the timelines specified in the IWM Plan.

The Division anticipates that the increased idle well fees and bonding requirements provided in AB 2729 will induce more operators to file IWM Plans in lieu of paying more to maintain their inventory of idle wells. Any operator seeking to file an IWM Plan must do so prior to January 31, 2018, or be subject to the new fee and bonding regime. Due to the early 2018 filing date, the Division will require operators who want to be exempted from these fees according to the bill, to begin submitting IWM Plans in the fall of 2017. In the summer of 2017, the Division will need to have staff develop the specific management plan criteria that complies with the requirements of AB 2729. In order to properly analyze and approve the IWM Plans, new Division staff must be hired and trained well before the January 2018 deadline.

Beyond requiring operators to develop new IWM Plans, AB 2729 increases the number of idle wells an operator must properly plug and abandon each year. In order to adequately review an operator's compliance, the Division must hire additional engineering staff to inspect the IWM Plans, and ensure that wells identified in the IWM Plan are being properly plugged and abandoned. Beyond the original reviews, Division staff must annually review the IWM Plans to ensure proper adherence to the schedule. Additionally, Section 10 of the bill authorizes the Supervisor to prioritize the order in which wells are plugged. The Division is likely to use this authority to ensure that operators focus on the wells of the highest risk rather than plugging the lowest cost wells to meet the requirement. The new plug and abandonment schedule is provided below:

# of Operator's Idle Wells	# of Pre-existing Long-Term Idle Wells That Must be Plugged & Abandoned/Year	# of New Long-Term Idle Wells That Must be Plugged & Abandoned/Year		
1 – 20	1	4%		
21 – 50	2	4%		
51 – 100	5	4%		
101 – 250	10	4%		
250 – 1,250	4%	5%		
1,250+	4%	6%		

New Regulatory Requirements Imposed by AB 2729

To ensure that idle wells are properly managed, AB 2729 instructs the Department to review and update idle well regulations by June 1, 2018. The development of these regulations will require significant technical expertise from Division staff and impose costs to the Department. The Division currently anticipates conducting the required regulatory review and revision prior to the June 1, 2018, deadline to better align the adoption of the new regulations with the new fee and reporting requirements set to take effect on January 1, 2018. To ensure the Division meets this timeline, additional technical staff must be hired in 2017 to lead the technical development of the new regulations.

New Staffing Requirements

In order to adequately manage and regulate the additional 6,000 idle wells in California, the Department estimates the following additional staff authority will be required:

Senior Oil and Gas Engineer (SOGE) - 2.0

The two SOGEs will be divided between headquarters and the Southern District. The SOGE in headquarters will lead the IWM Program, while the SOGE in the Southern District will address the Districts challenges associated to the large number of idle wells in highly populated urban environment. The Sacramento position, will coordinate the idle well program that will include supervising the evaluation of operator submitted IWM Plans, and the evaluation of future production capabilities of long-term idle wells. The SOGE will also work with District staff to ensure program requirements are implemented consistently between District offices. This will include tracking the idle well testing to ensure it is performed according to the schedules, to ensure the tests are run appropriately, and to ensure that the test results are evaluated to determine the risks identified by the testing and that appropriate mitigation is performed to lower any risks to an acceptable level. If, or when, operators are non-compliant, the SOGE will coordinate the enforcement activity to ensure compliance in a timely manner. The SOGE in the Southern District will work closely with the SOGE in headquarters, as well as interfacing extensively with local governmental agencies and operators to address the testing and plugging of the idle wells, many located in populated neighborhoods.

	Hours to	# of	Total
Senior Oil and Gas Engineer Workload	Perform	items	Hours
Supervise the development and operations of the IWMP	12	100	1,200
Supervise district staff performing idle well integrity testing,		!	
evaluation of IWM Plans, and evaluation of engineering studies for production/injection viability	34	15	510
Interface with district staff to ensure compliance with regulations,			
development of best practices, and encourage transparency and cooperation	50	4	200
Interfacing with local agencies to prioritize the plugging of long-term idle wells	18	56	1008
Overseeing the District's activities to ensure compliance with idle well testing, monitoring, tracking, and idle well fee payments	.5	2379	1189
Other duties as assigned			100
Total			4,207

Associate Oil and Gas Engineers (AOGE) - 7.0

These AOGEs will be divided between the Districts and the headquarters office. The positions in the District offices will be responsible to monitor the testing schedule for all idle wells in their Districts; review the test results to evaluate potential threats to life, health, property, or natural resources; and to ensure that the operator's IWM Plans are being followed and updated where appropriate. These positions will evaluate engineering reports/studies to determine production viability and prepare an analysis for the Program Manager (SOGE). In addition, these positions will act as a lead to gather data in support of an enforcement action. These positions will also act as a lead and mentor to field engineers for the idle well testing and the evaluations of the results.

The AOGEs in headquarters will audit the work being performed by the District offices regarding the inspections, testing, and plugging of idle wells. They will provide a second review of the IWM Plans and the engineering studies and reports regarding the viability of future production potential of long-term idle wells. In addition, the AOGEs in headquarters will support the development of enforcement actions for non-compliant operators. These AOGEs will also support training and the mentoring of District staff in the running of the IWMP. The positions will be phased in with 4 starting in 17/18. These positions will support the development of the program and prepare training materials to bring the program fully online. The remaining 3 positions will be brought on in 18/19 to address the full implementation of the program.

Associate Oil and Gas Engineer Workload	Hours to Perform	# of items	Total Hours
Monitor and evaluate testing schedules	.2	26,000	5,200
Review and evaluate test results	.2	15,000	3,000
Evaluate IWM Plans	15	100	1,500
Conduct engineering study reviews to determine production/injection viability	3.75	800	3,000
Collect supporting data on non-compliant operators and assist with preparing request for enforcement action	25	20	500
Act as lead to monitor and evaluate idle well testing protocols	125	2	250
Other duties as assigned			550
Total			14,000

Engineering Geologist (EG) - 6.0

The EGs will be divided among the Districts according to the District's workloads. The EGs will be responsible for inspecting and witnessing field tests, such as fluid level surveys, pressure tests, and cleanout tags and providing field reports as to the results of these inspections and tests. These positions will help support the evaluation of IWM Plans and engineering studies regarding the future production viability. Since most of the idle well testing will occur after the regulations are in effect, only two of these positions will be brought on in 17/18 to assist with the program development. In 18/19, the four additional positions will be brought on to address the testing and inspection requirements.

	Hours to	# of	Total
Engineering Geologist Workload	Perform	items	Hours
Witness 25% or more of the fluid level surveys and prepare field testing results reports	.5	3,750	1,875
Witness 25% or more of the pressure tests and prepare field testing results reports	1	2,500	2,500
Witness 25% or more of the cleanout tags and prepare field testing results reports	1.5	1,125	1687
Assist with the evaluation of the engineering studies	2	1,000	2,000
Conduct wellhead inspections and verification of normal conditions	.25	10,000	2,500
Assist with the evaluations of the IWM Plans	3	343	1,030
Other duties as assigned			500
Total			12,092

E. Outcomes and Accountability

Approving this request enhances the Division's regulatory framework for idle well testing and inspections. The requested personnel will support the intent of AB 2729 and ensure that wells that have shown no activity and are classified as idle wells, are not causing harm. This will support the Division's mandate to prevent, as far as possible, damage to life, health, property, and natural resources.

F. Analysis of All Feasible Alternatives

Alternative #1 – Approve requested 15.0 permanent positions and a baseline appropriation increase of \$1,500,000 (\$2,500,000 ongoing) from the Oil, Gas and Geothermal Administrative Fund (3046).

Pros:

- Ensures the Division has the resources to support a comprehensive regulatory framework for idle well inspections and testing in California that will adequately protect the public and the environment.
- Does not require any support from the General Fund.

Cons:

Requires additional resources.

Alternative #2 – Deny this BCP request.

Pros:

• No additional expenditures will be incurred.

Cons:

• Limits the Division's capacity to support the regulatory framework that has been developed to provide for increased monitoring and testing of idle wells throughout the State.

2017-18 Legislative Budget Change Proposal AB 2729 Implementation, Idle Well Testing

- Reduces the amount of inspections of idle wells in the State.
- Increases the risk of contamination of water of beneficial use in California.

Alternative #3 – Provide funding for a five-year limited term.

Pros:

- Reduces the overall expenditure that will be required.
- Provides resources needed to implement increased regulatory framework for five years.
- No impact to the General Fund.

Cons:

- Limited-term funding will not support the IWM Program over the long-term.
- The Division's ability to enforce the IWM Plans will be limited when funding runs out.

G. Implementation Plan

The Division will begin recruitment upon establishment of the new positions. Any operator seeking to file an IWM Plan must do so prior to January 31, 2018, or be subject to the new fee and bonding regime. Due to the early 2018 filing date, the Division will require operators who want to be exempted from these fees according to the bill, to begin submitting IWM Plans in the fall of 2017. In the summer of 2017, the Division will need to have staff develop the specific management plan criteria that complies with the requirements of AB 2729. In order to properly analyze and approve the IWM Plans, new Division staff must be hired and trained well before the January 2018 deadline.

H. Supplemental Information

None

I. Recommendation

The Department recommends Alternative #1 – approve requested 15.0 permanent positions and a baseline appropriation increase of \$1,500,000 (\$2,500,000 ongoing) from the Oil, Gas and Geothermal Administrative Fund (3046).